

Materials Exchange: An Alternative to Disposal

Minnesota Technical Assistance Program ■ FACT SHEET

Because of the increasing costs and liabilities associated with waste disposal, companies are searching for alternatives. Using a materials exchange is an alternative to disposal that can help companies do the following:

- Reduce disposal and purchase costs
- Reduce waste
- Conserve resources
- •Show environmental responsibility

Commonly Asked Questions_

What is a Materials Exchange?

A materials exchange is based on the idea that one company's waste is another company's raw material. Through a materials exchange, companies can reduce their waste disposal costs by finding other companies that can use the waste materials in their processes.

Described below are two examples of how companies exchanged industrial materials:

- 500 tons of lead-containing, ground-glass waste from a Minnesota lens grinding company were accepted by a lead smelter in Missouri that used the glass waste as a feedstock.
- Waste sulfuric acid from a circuit board manufacturer was accepted by a metal finisher that used the acid in a pickling operation.

How are Materials Exchanged?

Materials are exchanged through a variety of sources. The primary method for exchanging industrial materials is through an established materials exchange service. These services help businesses contact potential users of their waste material. Materials exchange services serve as information clearinghouses and publish newsletters or catalogs that list both materials available and materials wanted. The catalog listing also provides

a physical description of the waste material and its quantity and availability.

When a company finds a material that it is interested in acquiring, it contacts the exchange service to obtain the name and phone number of the company listing the material. It is then up to the two companies to make the exchange arrangements, such as transportation and price. Exchange services typically do not get involved in any of these arrangements.

Other sources for exchanging materials include:

Trade associations. Trade associations may be willing to list some types of available waste materials in their newsletters.

Local sources. Local sources can be used to place some materials. Below are some examples:

- Another department within your company or building may be able to reuse your waste materials.
- Local packaging and mailing services may take used packing peanuts or other shipping supplies.
- Community theater companies can use certain types of paint and lumber.
- Nonprofit organizations may need old office equipment.

What are Suitable Exchange Materials?

Waste materials suitable for exchanging can range from common acids and solvents, to plastics and potato peels. However, the easiest materials to exchange are those that are widely used, unexpired and uncontaminated. Materials that are part of a multicomponent system are more difficult to place.

What About Liability?

Companies need to treat the decision to use a materials exchange in the same way that they

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would treat any other business decision. Liability should be of concern to companies providing and receiving materials, particularly those that are hazardous. Before participating in an exchange of hazardous materials, companies should evaluate their disposal options and ensure that at least the following basic points have been considered:

- The Company providing the waste material can be held liable if the exchanged material is mishandled. Mishandling includes:
 - Not reporting leaking drums.
 Improper storage.
 Improper employee training on handling and use of materials.
- •The company providing the material must evaluate the perspective recipient of the material, as it would evaluate any other disposal option; evaluation may include contacting the Minnesota Pollution Control Agency (MPCA) or a metro county hazardous waste office to check on the recipient's compliance records, proposed uses and knowledge of hazardous waste regulations. If there is any doubt, the exchange should not take place.
- The recipient of the material should be sure that it can be properly used in the intended process. Don't take something just because it's free.
- Material Safety Data Sheets (MSDS) must be made available to the company accepting the material.

Transporting hazardous waste materials.

Regulation affecting the transportation of exchanged hazardous material will depend on whether the material is considered new or waste by the appropriate regulatory agency. For example:

 A new (virgin) material that is hazardous must be shipped according to federal and Minnesota Department of Transportation (MnDOT) hazardous materials regulation. A hazardous materials transporter is required for some materials.

Check with MnDOT and the Minnesota Pollution Control Agency (MPCA), or the appropriate county hazardous waste regulators for information about regulations, management and reporting requirements for transporting any new or waste hazardous materials.

Minnesota Materials Exchange Services

The following is a listing of materials exchange services that are part of the statewide Minnesota Materials Exchange Alliance. These services are available to Minnesota companies, and no fees are charged for listing or inquiring about materials.

- Minnesota Office of Environmental Assistance St. Paul, Minnesota 612/215-0216 or 800/657-3843 Alliance administrative coordinator, national contact and promoter of regional coordination.
- Minnesota Technical Assistance Program
 (MnTAP)
 University of Minnesota
 Minneapolis, Minnesota
 612/627-4646 or 800/247-0015
 Statewide technical coordinator, leader in developing statewide catalog, and Metro Area eXchange (MAX) service provider.
- Central Minnesota Materials Exchange St. Cloud, MN 320/656-3833
- Northeast Minnesota Waste Exchange Western Lake Superior Sanitary District Duluth, Minnesota 218/722-3336, ext. 440
 Serves Northeastern Minnesota.
- Olmsted County Materials Exchange (OCME)
 Rochester, Minnesota
 507/285-8231
 Serves Southeastern Minnesota.
- Southeast Minnesota Recyclers Exchange (SEMREX)

Winona, Minnesota 507/457-6464 Serves Blue Earth, Fillmore, Freeborn, Houston, Mower, Rice, Steele, Waseca and Winona counties.

 Southwest Minnesota Materials Exchange Worthington, Minnesota 507/372-8227
 Serves Southwestern Minnesota.

For More Information

To list a material or for more information about the materials exchange, call MnTAP at 612/627-4646 or 800/247-0015 in greater Minnesota.